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FITZPATRICK CELLA HARPER & SCINTO
1290 Avenue of the Americas
NEW YORK, NY 10104-3800

EXAMINER	
DICKERSON, CHAD S	
ART UNIT	PAPER NUMBER
2625	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/687,746	ITO ET AL.	
	Examiner	Art Unit	
	CHAD DICKERSON	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 October 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,9-11, 13, 15, 16, 18 and 19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,9-11, 13, 15, 16, 18 and 19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/9/2009 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-3, 9-11 and 13, 15, 16, 18 and 19 have been considered but are moot in view of the new ground(s) of rejection. The Amendment to the claim necessitated the new ground(s) of rejection. However, the references of Ohtsuka '526, Niikawa '500 and Niikawa '618 are still being applied. The Examiner would like to briefly respond to some of the Applicant's comments on page 15.

On page 15, the Applicant discussed that proposed claim amendment was incorporated to clarify certain aspects of the claims. In remembering the interview, the suggested clarification was offered to assist Applicant's Representative in making sure that the features Applicant's representative believed were performed by the invention were clearly stated in the claims. However, with the further clarification, the Examiner

stated that this further clarification would not necessarily overcome the applied references, or other prior art.

The Examiner mentioned other relevant references that may be able to read on the claimed invention such as the reference of Nakami (Us Pub 2003/0035127) that offered the feature of having a digital camera send image data information to a PC and to a printing device. However, the Examiner looked for related applications to this reference and discovered the reference of Nakajima that could be applied to the newly amended claims. The Nakajima '687 reference discloses sending information to a printing device that with image corrections to the data stored in the camera. The image correction information is then sent to a printing device to be incorporated in the image data for printing. The printing device automatically checks to see if the graphics processing control information (hereinafter referred to as GC) is contained within the graphics file (GF). If the GC is contained within the graphics file, the printer continues printing with the GC parameters being used in the printing process[1]. Further along in the specification, the Examiner believes that other features of the invention performs the features of *the generated interruption event includes the print settings set by said operation panel and the print settings included in the received interruption event are reflected in the image data*.

Regarding the previously applied references, the Examiner still believes that the claim limitation of "1) *a controller which generates an interruption event for causing said host computer to effect a preview display of the image data transmitted by said*

[1] See Nakajima '687 at ¶ [0079]-[0090].

transmission means, in accordance with said operation panel setting the print settings after the image data read out by said reading means is transmitted to said host computer by said transmission means so that the generated interruption event is transmitted to said host computer" is still disclosed. The Niikawa '500 reference discloses the feature of "*a controller that generates an interruption event for causing a host computer to effect a preview display of image data transmitted by said transmission means*". The Niikawa '500 reference discloses that every time a shutter button (c9) is actuated, a window (1008) is used to show a preview of the photographed image data[2]. The combination of this reference with the Niikawa '618 performs the rest of the claim feature stating "*in accordance with said operation panel setting the print settings after the image data read out by said reading means is transmitted to said host computer by said transmission means so that the generated interruption event is transmitted to said host computer*". For example, the reference of Niikawa '618 discloses a digital camera "*executing an application in the personal computer*"[3]. With the Niikawa '500 reference able to perform the function of modifying the color balance of an image disclosed in figure 12 and this feature being executed by a camera in the Niikawa '618 reference, the feature of sending an image and then modifying that image afterward using application execution option by the camera device is performed with the above combination.

Lastly, regarding the last feature, the Examiner is using the reference of Nakajima '687 to disclosed the feature of "*the generated interruption event includes the*

[2] See Niikawa '500 at col. 10, ll. 1-24.

print settings set by said operation panel and the print settings included in the received interruption event are reflected in the image data". For example, in Nakajima, the reference discloses a user setting different graphic processing control information for graphics data that is comprised of photo data taken[4]. Once the user sets this information, the user is able to send the whole graphics file (GF) to an output device, such as a computer, that is able to perform the graphics processing similar to the printing device mentioned in the Nakajima reference. In this case, the computer is able to receive an event from the user interface of the digital camera and this transmission includes the settings that will be used to output the image data on the computer, which can then be forwarded to a printing device. The image data is read by the processing device within the computer and the different image settings can be automatically applied to the image data. Once these settings are applied to the image data, the processed image data can be reflected in the display of the computer[5]. With these features being performed by the Nakajima '687 reference, the Examiner believes that the print settings set by the camera device that are included in the event transmitted to the computer and reflected in the image data performs the above claim feature.

Therefore, with the combination of Ohtsuka '526 with the references of Niikawa '500, '618 and Nakajima '687, the Examiner believes the claim limitations are disclosed.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

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[3] See Niikawa '618 at col. 11, ll. 41-66.

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 19 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim limitation of "wherein said printer includes print setting means therein and transmits print settings set by said print setting means to said external operating apparatus" is described, explicitly or implicitly, within the specification. Since this claimed feature is not described in the specification, it is considered as new matter.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-3, 9-11 and 13, 15, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohtsuka '526 (USP 6198526) in view of Niikawa (USP 7042500), Niikawa '618 (USP 7161618) and Nakajima '687 (US pub 2002/0135687).

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[4] See Nakajima '687 at ¶ [0056]-[0062].
[5] Id. at ¶ [0107]-[0111].

Re claim 1: Ohtsuka '526 discloses a print system comprising an external apparatus, a host computer which communicates with said external operating apparatus, and a printer which communicates with said host computer,

wherein said external operating apparatus comprises

a display unit which displays a print setting screen (i.e. the digital camera used contains a monitor on the camera that displays setting value choices regarding print settings; see col. 6, ll. 1-56);

an operation panel which is operative to set print settings in accordance with a print setting instruction provided by a user based on the print setting screen displayed on said display unit (i.e. in the system, the digital camera has an operational panel, which allows the user to see the picture that has been photographed and also allows the user to set order information in regards to the necessity of printing and the quantity of prints desired by the user. The quantity of prints can be considered as the print setting instruction. With the function of setting the above parameters on the digital camera, it is clear that an input is received on the operational panel on the camera to signal a necessity of printing or quantity of printing to the digital camera. The digital camera is considered as an external operating apparatus; see fig. 1; col. 1, ll. 18-26 and col. 6, ll. 1-56),

a controller which generates a plurality of interruption events including a print setting information interruption event for causing said host computer to set therein the print settings of the image data, the print setting information interruption event being generated in accordance with said operation panel setting the print settings (i.e. the

digital camera is used to receive a printer instruction on the operation panel and this interruption event causes flags set for print settings and print necessity to be set. The flags are then read by the host computer in order to set the print settings and other image data together in an order file before being transmitted to another device on a network; see col. 6, ll. 3-64), and

wherein said host computer comprises

a receiving unit which receives the image data (i.e. in the system both the personal computer (4) and the order receiving apparatus (1) can be considered as a host computer. The personal computer (4) is able to receive image data from the digital camera. The input from the digital camera relates to information that was stored as a predetermined value before the information was input into the personal computer (4); see fig. 1; col. 7, ll. 1-66), and

a print control unit which generates print data corresponding to the print settings (i.e. the order information instructs the printer to generate print data corresponding to the order information (12) specified in the order file (10). Although a print control unit is not specified, the order receiving apparatus (1) is clearly the printer control unit since the instructions for the printer has to be recognized and processed by the order receiving apparatus (1) and the printer is controlled by the apparatus (1) in order to output the desired document of the user; see fig. 1; col. 7, ll. 1-66, col. 8, ll. 35- 66, col. 9, ll. 1, 2 and col. 10, ll. 17-33), and

wherein said printer prints the print data output from said host computer (i.e. the image and order files (9 and 10) are both used to reflect what the user desires to have

printed by the printer (2) and this information has been outputted by the order receiving apparatus (1). Since the personal computer (4) sends information to the order receiving apparatus to be printed, this is considered as the host computer that outputted print data to the printer (2); see fig. 1; col. 7, ll. 1-66, col. 8, ll. 35- 66, col. 9, ll. 1, 2 and col. 10, ll. 17-33).

However, Ohtsuka '526 fails to teach wherein said external operating apparatus comprises: reading means for reading out image data from a detachable storage medium; a preview button operative to instruct said host computer to preview the image data read out by said reading means; transmission means for transmitting the image data read out by said reading means, to said host computer in response to said preview button being operated; wherein said host computer comprises: a receiving unit which receives the image data read out by said reading means and then transmitted by said transmission means from said storage medium, and receives the plurality of interruption events generated by said controller from said external operating apparatus; a control unit which detects whether the setting information interruption event is received by said receiving unit and controls preview display such that the settings included in the received setting information interruption event are reflected in the image data received by said receiving unit, every time the setting information interruption event is detected.

However, this is well known in the art as evidenced by Niikawa ‘500. Niikawa ‘500 discloses wherein said external operating apparatus comprises:

reading means for reading out image data from a detachable storage medium (i.e. like the system of Ohtsuka, the reference of Niikawa comprises a camera

communicating with a computer and the computer is connected to a printing device for printing (same field of endeavor). However, the card I/F (212) is used to read image data from the memory card (8), which is considered as a detachable storage medium; see col. 6, ll. 9-13);

a preview button operative to instruct said host computer to preview the image data read out by said reading means (i.e. when the user presses the shutter button (9), this action creates a preview of the image on the computer screen of the Pc (1000). Since the shutter button operates in a manner analogous to the preview button, the above claim feature is performed; see col. 6, ll. 46 – col. 8, ll. 8 and col. 10, ll. 1-11);

transmission means for transmitting the image data read out by said reading means, to said host computer in response to said preview button being operated (i.e. in the system, the digital camera (1) can connected to the PC (1000) and it is able to transmit image data read out from its memory and an interruption event notifying the PC (1000) of the connection to the PC to the digital camera. The communication I/F (213) is used to transmit image data read out to the computer connected to the camera. When the user presses the shutter button (9), this action creates a preview of the image on the computer screen of the Pc (1000). Since the shutter button operates in a manner analogous to the preview button, the above claim feature is performed; see col. 6, ll. 46 – col. 8, ll. 8 and col. 10, ll. 1-11);

wherein said host computer comprises:

a receiving unit which receives the image data read out by said reading means and then transmitted by said transmission means from said storage medium, and

receives the plurality of interruption events generated by said controller from said external operating apparatus (i.e. in the system, the host computer is able to receive image data from the digital camera once the camera reads image data from the memory card (8) and transmits this information to the computer through the communication I/F (213); see col. 6, ll. 9-13);

a control unit which detects whether the setting information interruption event is received by said receiving unit (i.e. in the system, the camera can send an interruption event regarding the updating of the image in the camera. If the image in the camera is changed, this is reflected in the PC's monitor. Also, the computer can receive information regarding the setting changes of the image data from the computer input devices; see col. 7, ll. 60-col. 8, ll. 20) and controls preview display such that the settings included in the received setting information interruption event are reflected in the image data received by said receiving unit, every time the setting information interruption event is detected (i.e. in the PC, the monitor is updated in the change of the display when the color balance is adjusted in the system. The monitor of the PC being updated occurs in order to confirm the setting changes on the images. Also, the system is able to reflect the update of the image that may have changed due to movement of the camera or a different image being taken with different scene information. This is shown in the camera and the updated screen in the computer; see fig. 12; col. 7, ll. 42 - col. 9, ll. 41).

Therefore, in view of Niikawa '500, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of wherein said external

operating apparatus comprises: reading means for reading out image data from a detachable storage medium; a preview button operative to instruct said host computer to preview the image data read out by said reading means; transmission means for transmitting the image data read out by said reading means, to said host computer in response to said preview button being operated; wherein said host computer comprises: a receiving unit which receives the image data read out by said reading means and then transmitted by said transmission means from said storage medium, and receives the plurality of interruption events generated by said controller from said external operating apparatus; a control unit which detects whether the setting information interruption event is received by said receiving unit and controls preview display such that the settings included in the received setting information interruption event are reflected in the image data received by said receiving unit, every time the setting information interruption event is detected, incorporated in the device of Ohtsuka '526, in order to have a digital camera contain a communication interface to communicate with a PC (as stated in Niikawa '500 col. 6, ll. 9-13).

However, the references of Ohtsuka '526 and Niikawa '500 fail to specifically teach a controller which generates a plurality of interruption events including a print setting information interruption event for causing said host computer to set therein the print settings of the image data transmitted by said transmission means, the print setting information interruption event being generated in accordance with said operation panel setting the print settings after the image data read out by said reading means is

transmitted to said host computer by said transmission means so that the generated print setting information interruption event is transmitted to said host computer.

However, this is well known in the art as evidenced by Niikawa '618. Niikawa '618 discloses a controller which generates a plurality of interruption events including a print setting information interruption event for causing said host computer to set therein the print settings of the image data transmitted by said transmission means, the print setting information interruption event being generated in accordance with said operation panel setting the print settings after the image data read out by said reading means is transmitted to said host computer by said transmission means so that the generated print setting information interruption event is transmitted to said host computer (i.e. like the above applied references, the Niikawa '618 reference comprises a camera to send instructions and events to a computer and the computer is connected to a printer for printing (same field of endeavor). However, unlike Niikawa '500, Niikawa '618 discloses specifically sending an instruction from the camera operation panel to the computer after image data has been sent to the computer. As shown in figure 15, function keys can be registered to perform the features of displaying image data in a PC or execute an application in the personal computer. The user of the camera can set a function key to transmit image data to a PC and once the button is pressed, the key is able to perform this feature. Then the user can set another function key to perform a feature of displaying this data on the PC monitor. The system can also assign a function key for executing an application on the PC and the application on the PC can be similar to the color adjusting program performed in the Niikawa '500 reference. The above is an

example of sending an instruction to the PC after the image data is sent to a computer. It is also understood that the controller of the camera is used to generate the interruption event associated with the function keys. With the Ohtsuka reference modified by the references of Niikawa '500 and '618, the above claim limitation is performed; see fig. 15; col. 2-67).

Therefore, in view of Niikawa '618, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of a controller which generates a plurality of interruption events including a print setting information interruption event for causing said host computer to set therein the print settings of the image data transmitted by said transmission means, the print setting information interruption event being generated in accordance with said operation panel setting the print settings after the image data read out by said reading means is transmitted to said host computer by said transmission means so that the generated print setting information interruption event is transmitted to said host computer, incorporated in the device of Ohtsuka '526, as modified by the features of Niikawa '500, in order to have the live-view image being taken by the camera to be displayed on the monitor of the personal computer (as stated in Niikawa '618 col. 1, ll. 19-32).

However, the combination of Ohtsuka '526 in view of Niikawa '500 and Niikawa '618 fails to specifically teach the generated print setting information interruption event includes the print settings set by said operation panel and is transmitted to said host computer, a control unit which detects whether the interruption event received by said receiving unit is the print setting information interruption event, and controls print

preview display such that the print settings included in the received print setting information interruption event are reflected in the image data, every time the print setting information interruption event is detected, and the print settings included in the received print setting information interruption event, wherein the print settings reflected in the print preview display are the same print settings used to generate print data.

However, this is well known in the art as evidenced by Nakajima '687. Nakajima '687 discloses the generated print setting information interruption event includes the print settings set by said operation panel and is transmitted to said host computer (i.e. the system of Nakajima '687, like Niikawa '500 and '618, contains a camera to send instructions and events to a computer and the computer is connected to a printer for printing (same field of endeavor). However, in Nakajima, the reference discloses a user setting different graphic processing control information for graphics data that is comprised of photo data taken. Once the user sets this information, the user is able to send the whole graphics file (GF) to an output device, such as a computer, that is able to perform the graphics processing similar to the printing device mentioned in the Nakajima reference; see ¶ [0056]-[0062] and [0107]-[0111]),

a control unit which detects whether the interruption event received by said receiving unit is the print setting information interruption event, and controls print preview display such that the print settings included in the received print setting information interruption event are reflected in the image data, every time the print setting information interruption event is detected (i.e. in Nakajima, a computer is able to receive an event from the user interface of the digital camera and this transmission

includes the settings that will be used to output the image data on the computer, which can then be forwarded to a printing device. The image data is read by the processing device within the computer and the different image settings can be automatically applied to the image data. Once these settings are applied to the image data, the processed image data can be reflected in the display of the computer. Every time the user sends image data over to the computer device, the application software used to perform the graphics processing checks to see if graphics processing control information is included in the image data sent to the computer; see ¶ [0056]-[0062], [0088]-[0091] and [0107]-[0111]),

the print settings included in the received print setting information interruption event, wherein the print settings reflected in the print preview display are the same print settings used to generate print data (i.e. in the system, the graphics processing settings that are reflected in the graphics processing control information are the same settings that are reflected in the computer display. Moreover, these same settings are going to be used in printing the image in order for the image to reflect the exact settings input by the user; ¶ [0006]-[0011]).

Therefore, in view of Nakajima '687, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of the generated print setting information interruption event includes the print settings set by said operation panel and is transmitted to said host computer, a control unit which detects whether the interruption event received by said receiving unit is the print setting information interruption event, and controls print preview display such that the print

settings included in the received print setting information interruption event are reflected in the image data, every time the print setting information interruption event is detected, and the print settings included in the received print setting information interruption event, wherein the print settings reflected in the print preview display are the same print settings used to generate print data, incorporated in the device of Ohtsuka '526, as modified by the references of Niikawa ‘500 and Niikawa ‘618 in order to enable graphics processing to be performed to graphics data that accounts for the generation condition(s) (as stated in Nakajima ‘687 ¶ [0008]).

Re claim 2: The teachings of Ohtsuka '526 in view of Niikawa ‘500, Niikawa ‘618 and Niikawa ‘134 are disclosed above.

Ohtsuka '526 discloses a system, wherein said controller generates the interruption event according to the print start instruction (i.e. when the user desires to instruct a print to the printer, the user uses the function on the digital camera to set order information (7) in regards to the necessity of printing and sends this information to the printer through the personal computer (4). When the function changes a print flag to 1, this generates a signal, analogous to an interruption event, to correspond to the print instruction in order to instruct the printer to start printing once the order information (7) is received by the order receiving apparatus (1) and then to the printer (2); see fig. 1; col.6, ll. 1-66, col. 7, ll. 1-66, col. 8, ll. 35- 66, col. 9, ll. 1, 2 and col. 10, ll. 17-33).

Re claim 3: The teachings of Ohtsuka ‘526 in view of Niikawa ‘500, Niikawa ‘618 and Niikawa ‘134 are disclosed above.

Ohtsuka '526 discloses a system, wherein said control unit detects whether the interruption event received by said receiving unit corresponds to said print start instruction, said print control unit outputs to said printer the print data to which the print setting instructions received by the plurality of interruption events received so far are reflected to said printer (i.e. when the printer receives the instruction to print an image by the print necessity flag equaling 1, the printer also recognizes the print settings relating to the print data in the image information (11) in the image file (9). The plurality of print settings is a plurality of signals recognized by the digital camera each time a different print setting is entered in the system. This is also the case for the personal computer (4), if the personal computer is used as the external operating apparatus that can have different print settings entered into the system through the personal computer (4). The order receiving apparatus (1) outputs the print data that reflects the print settings received by the order file (10) from the personal computer (4) through transmission and are outputs this information to the printer (2); see fig. 1; col.6, ll. 1-66, col. 7, ll. 1-66, col. 8, ll. 35-66, col. 9, ll. 1, 2 and col. 10, ll. 17-33).

Re claim 9: Ohtsuka '526 discloses an information processing apparatus which can communicate with an external operating apparatus including a display unit which displays a print setting screen (i.e. the digital camera used contains a monitor on the camera that displays setting value choices regarding print settings; see col. 6, ll. 1-56);

an operation panel which is operative to set print settings in accordance with a print setting instruction provided by a user based on the print setting screen displayed on said display unit (i.e. in the system, the digital camera has an operational panel, which allows the user to see the picture that has been photographed and also allows the user to set order information in regards to the necessity of printing and the quantity of prints desired by the user. The quantity of prints can be considered as the print setting instruction. With the function of setting the above parameters on the digital camera, it is clear that an input is received on the operational panel on the camera to signal a necessity of printing or quantity of printing to the digital camera. The digital camera is considered as an external operating apparatus; see fig. 1; col. 1, ll. 18-26 and col. 6, ll. 1-56), a controller which generates a plurality of interruption events including a print setting information interruption event for causing said information processing apparatus to set therein the print settings of the image data, the print setting information interruption event being generated in accordance with said operation panel setting the print settings (i.e. the digital camera is used to receive a printer instruction on the operation panel and this interruption event causes flags set for print settings and print necessity to be set. The print settings associated with the image data is then sent to the computer in order to be organized into an order file that will be sent to a network laboratory; see col. 6, ll. 3-64), and a printer, said apparatus comprising:

a receiving unit which receives the image data (i.e. in the system both the personal computer (4) and the order receiving apparatus (1) can be considered as a host computer. The personal computer (4) is able to receive image data from the digital

camera. The input from the digital camera relates to information that was stored as a predetermined value before the information was input into the personal computer (4); see fig. 1; col. 7, ll. 1-66), and

a print control unit which generates print data corresponding to the print setting (i.e. the order information instructs the printer to generate print data corresponding to the order information (12) specified in the order file (10). Although a print control unit is not specified, the order receiving apparatus (1) is clearly the printer control unit since the instructions for the printer has to be recognized and processed by the order receiving apparatus (1) and the printer is controlled by the apparatus (1) in order to output the desired document of the user; see fig. 1; col. 7, ll. 1-66, col. 8, ll. 35- 66, col. 9, ll. 1, 2 and col. 10, ll. 17-33), and

and outputting the generated print data to said printer (i.e. the image and order files (9 and 10) are both used to reflect what the user desires to have printed by the printer (2) and this information has been outputted by the order receiving apparatus (1). Since the personal computer (4) sends information to the order receiving apparatus to be printed, this is considered as the host computer that outputted print data to the printer (2); see fig. 1; col. 7, ll. 1-66, col. 8, ll. 35- 66, col. 9, ll. 1, 2 and col. 10, ll. 17-33).

However, Ohtsuka '526 fails to teach wherein said external operating apparatus including reading means for reading out image data from a detachable storage medium; a preview button operative to instruct said host computer to preview the image data read out by said reading means; transmitting means for transmitting the image data read out by said reading means, to said information processing apparatus in response

to said preview button being operated; a receiving unit which receives the image data and the plurality of interruption events transmitted from said external operating apparatus; a control unit which detects whether the setting information interruption event is received by said receiving unit and controls preview display such that the settings included in the received setting information interruption event are reflected in the image data received by said receiving unit, every time the setting information interruption event is detected.

However, this is well known in the art as evidenced by Niikawa '500. Niikawa '500 discloses wherein said external operating apparatus including reading means for reading out image data from a detachable storage medium (i.e. like the system of Ohtsuka, the reference of Niikawa comprises a camera communicating with a computer and the computer is connected to a printing device for printing (same field of endeavor). However, the card I/F (212) is used to read image data from the memory card (8), which is considered as a detachable storage medium; see col. 6, ll. 9-13);

a preview button operative to instruct said host computer to preview the image data read out by said reading means (i.e. when the user presses the shutter button (9), this action creates a preview of the image on the computer screen of the Pc (1000). Since the shutter button operates in a manner analogous to the preview button, the above claim feature is performed; see col. 6, ll. 46 – col. 8, ll. 8 and col. 10, ll. 1-11);

transmission means for transmitting the image data read out by said reading means, to said host computer in response to said preview button being operated (i.e. in the system, the digital camera (1) can connected to the PC (1000) and it is able to

transmit image data read out from its memory and an interruption event notifying the PC (1000) of the connection to the PC to the digital camera. The communication I/F (213) is used to transmit image data read out to the computer connected to the camera. When the user presses the shutter button (9), this action creates a preview of the image on the computer screen of the Pc (1000). Since the shutter button operates in a manner analogous to the preview button, the above claim feature is performed; see col. 6, ll. 46 – col. 8, ll. 8 and col. 10, ll. 1-11);

a receiving unit which receives the image data and the plurality of interruption events transmitted from said external operating apparatus (i.e. in the system, the camera can send an interruption event regarding the update of the image in the camera. If the image in the camera is changed, this is reflected in the PC's monitor and the update of the image sent to computer is considered an interruption event; see col. 7, ll. 60-col. 8, ll. 20) and

a control unit which detects whether the setting information interruption event is received by said receiving unit (i.e. in the system, the camera can send an interruption event regarding the updating of the image in the camera. If the image in the camera is changed, this is reflected in the PC's monitor. Also, the computer can receive information regarding the setting changes of the image data from the computer input devices; see col. 7, ll. 60-col. 8, ll. 20) and controls preview display such that the settings included in the received setting information interruption event are reflected in the image data received by said receiving unit, every time the setting information interruption event is detected (i.e. in the PC, the monitor is updated in the change of the

display when the color balance is adjusted in the system. The monitor of the PC being updated occurs in order to confirm the setting changes on the images. Also, the system is able to reflect the update of the image that may have changed due to movement of the camera or a different image being taken with different scene information. This is shown in the camera and the updated screen in the computer; see fig. 12; col. 7, ll. 42 - col. 9, ll. 41).

Therefore, in view of Niikawa '500, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of wherein said external operating apparatus including reading means for reading out image data from a detachable storage medium; a preview button operative to instruct said host computer to preview the image data read out by said reading means; transmitting means for transmitting the image data read out by said reading means, to said information processing apparatus in response to said preview button being operated; a receiving unit which receives the image data and the plurality of interruption events transmitted from said external operating apparatus; a control unit which detects whether the setting information interruption event is received by said receiving unit and controls preview display such that the settings included in the received setting information interruption event are reflected in the image data received by said receiving unit, every time the setting information interruption event is detected, incorporated in the device of Ohtsuka '526, in order to have a digital camera contain a communication interface to communicate with a PC (as stated in Niikawa '500 col. 6, ll. 9-13).

However, the references of Ohtsuka '526 and Niikawa '500 fail to specifically teach a controller which generates a plurality of interruption events including a printer setting information interruption event for causing said information processing apparatus to set therein the print settings of the image data transmitted by said transmission means, the print setting information interruption event being generated in accordance with said operation panel setting the print settings after the image data read out by said reading means is transmitted to said information processing apparatus by said transmission means so that the generated print setting information interruption event is transmitted to said information processing apparatus.

However, this is well known in the art as evidenced by Niikawa '618. Niikawa '618 discloses a controller which generates a plurality of interruption events including a printer setting information interruption event for causing said information processing apparatus to set therein the print settings of the image data transmitted by said transmission means, the print setting information interruption event being generated in accordance with said operation panel setting the print settings after the image data read out by said reading means is transmitted to said information processing apparatus by said transmission means so that the generated print setting information interruption event is transmitted to said information processing apparatus (i.e. like the above applied references, the Niikawa '618 reference comprises a camera to send instructions and events to a computer and the computer is connected to a printer for printing (same field of endeavor). However, unlike Niikawa '500, Niikawa '618 discloses specifically sending an instruction from the camera operation panel to the computer after image

data has been sent to the computer. As shown in figure 15, function keys can be registered to perform the features of displaying image data in a PC or execute an application in the personal computer. The user of the camera can set a function key to transmit image data to a PC and once the button is pressed, the key is able to perform this feature. Then the user can set another function key to perform a feature of displaying this data on the PC monitor. The system can also assign a function key for executing an application on the PC and the application on the PC can be similar to the color adjusting program performed in the Niikawa '500 reference. The above is an example of sending an instruction to the PC after the image data is sent to a computer. It is also understood that the controller of the camera is used to generate the interruption event associated with the function keys. With the Ohtsuka reference modified by the references of Niikawa ‘500 and ‘618, the above claim limitation is performed; see fig. 15; col. 2-67).

Therefore, in view of Niikawa ‘618, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of a controller which generates a plurality of interruption events including a printer setting information interruption event for causing said information processing apparatus to set therein the print settings of the image data transmitted by said transmission means, the print setting information interruption event being generated in accordance with said operation panel setting the print settings after the image data read out by said reading means is transmitted to said information processing apparatus by said transmission means so that the generated print setting information interruption event is transmitted to said

information processing apparatus, incorporated in the device of Ohtsuka ‘526, as modified by the features of Niikawa ‘500, in order to have the live-view image being taken by the camera to be displayed on the monitor of the personal computer (as stated in Niikawa ‘618 col. 1, ll. 19-32).

However, the combination of Ohtsuka '526 in view of Niikawa ‘500 and Niikawa ‘618 fails to specifically teach the generated print setting information interruption event includes the print settings set by said operation panel and is transmitted to said information processing apparatus, a control unit which detects whether the interruption event received by said receiving unit is the print setting information interruption event, and controls print preview display such that the print settings included in the received print setting information interruption event are reflected in the image data, every time the print setting information interruption event is detected, and the print settings included in the received print setting information interruption event, wherein the print settings reflected in the print preview display are the same print settings used to generate print data.

However, this is well known in the art as evidenced by Nakajima ‘687. Nakajima ‘687 discloses the generated print setting information interruption event includes the print settings set by said operation panel (i.e. the system of Nakajima ‘687, like Niikawa ‘500 and ‘618, contains a camera to send instructions and events to a computer and the computer is connected to a printer for printing (same field of endeavor). However, in Nakajima, the reference discloses a user setting different graphic processing control information for graphics data that is comprised of photo data taken. Once the user sets

this information, the user is able to send the whole graphics file (GF) to an output device, such as a computer, that is able to perform the graphics processing similar to the printing device mentioned in the Nakajima reference; see ¶ [0056]-[0062] and [0107]-[0111]),

a control unit which detects whether the interruption event received by said receiving unit is the print setting information interruption event, and controls print preview display such that the print settings included in the received print setting information interruption event are reflected in the image data, every time the print setting information interruption event is detected (i.e. in Nakajima, a computer is able to receive an event from the user interface of the digital camera and this transmission includes the settings that will be used to output the image data on the computer, which can then be forwarded to a printing device. The image data is read by the processing device within the computer and the different image settings can be automatically applied to the image data. Once these settings are applied to the image data, the processed image data can be reflected in the display of the computer. Every time the user sends image data over to the computer device, the application software used to perform the graphics processing checks to see if graphics processing control information is included in the image data sent to the computer; see ¶ [0056]-[0062], [0088]-[0091] and [0107]-[0111]),

the print settings included in the received print setting information interruption event, wherein the print settings reflected in the print preview display are the same print settings used to generate print data (i.e. in the system, the graphics processing settings

that are reflected in the graphics processing control information are the same settings that are reflected in the computer display. Moreover, these same settings are going to be used in printing the image in order for the image to reflect the exact settings input by the user; ¶ [0006]-[0011]).

Therefore, in view of Nakajima '687, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of the generated print setting information interruption event includes the print settings set by said operation panel, a control unit which detects whether the interruption event received by said receiving unit is the print setting information interruption event, and controls print preview display such that the print settings included in the received print setting information interruption event are reflected in the image data, every time the print setting information interruption event is detected, and the print settings included in the received print setting information interruption event, wherein the print settings reflected in the print preview display are the same print settings used to generate print data, incorporated in the device of Ohtsuka '526, as modified by the references of Niikawa '500 and Niikawa '618 in order to enable graphics processing to be performed to graphics data that accounts for the generation condition(s) (as stated in Nakajima '687 ¶ [0008]).

Re claim 10: The teachings of Ohtsuka '526 in view of Niikawa '500, Niikawa '618 and Niikawa '134 are disclosed above.

Ohtsuka '526 discloses an apparatus, wherein said apparatus receives the interruption event corresponding to a print start instruction from said controller (i.e. when the user desires to instruct a print to the printer, the user uses the function on the digital camera to set order information (7) in regards to the necessity of printing and inputs this information to the personal computer (4). When the function changes a print flag to 1, this generates a signal, analogous to an interruption event, to correspond to the print instruction in order to instruct the printer to start printing once the order information (7) is received by the order receiving apparatus (1) and then to the printer (2). The host computer (4) can be considered as an external operating apparatus that sends information to the ordering computer (1) that informs the ordering computer that the order file needs to be printed and once this information is read and sent to the printer, this order file starts the printing of the printing device; see fig. 1; col.6, ll. 1-66, col. 7, ll. 1-66, col. 8, ll. 35- 66, col. 9, ll. 1, 2 and col. 10, ll. 17-33).

Re claim 11: The teachings of Ohtsuka ‘526 in view of Niikawa ‘500, Niikawa ‘618 and Niikawa ‘134 are disclosed above.

Ohtsuka '526 discloses an apparatus, wherein said control unit detects whether of the interruption event received by said receiving unit corresponds to the print start instruction, said print control unit outputs to said printer the print data in which the print settings received by the plurality of interruption events received so far are reflected (i.e. when the printer receives the instruction to print an image by the print necessity flag equaling 1, the printer also recognizes the print settings relating to the print data in the

image information (11) in the image file (9). The plurality of print settings is a plurality of signals recognized by the digital camera each time a different print setting is entered in the system. This is also the case for the personal computer (4), if the personal computer is used as the external operating apparatus that can have different print settings entered into the system through the personal computer (4). The order receiving apparatus (1) outputs the print data that reflects the print settings received by the order file (10) from the personal computer (4) through transmission and are outputs this information to the printer (2); see fig. 1; col.6, ll. 1-66, col. 7, ll. 1-66, col. 8, ll. 35-66, col. 9, ll. 1, 2 and col. 10, ll. 17-33).

Re claim 13: Ohtsuka '526 discloses a method of controlling a print system comprising an external operating apparatus, a host computer which communicates with said external operating apparatus, and a printer which communicates with said host computer,

wherein said method includes a control method for said external operating apparatus, comprising the steps of:

displaying a print setting screen on a display unit (i.e. the digital camera used contains a monitor on the camera that displays setting value choices regarding print settings; see col. 6, ll. 1-56);

setting, with an operation panel, print settings in accordance with a print setting instruction provided by a user based on the print setting screen displayed on said display unit (i.e. in the system, the digital camera has an operational panel, which allows

the user to see the picture that has been photographed and also allows the user to set order information in regards to the necessity of printing and the quantity of prints desired by the user. The quantity of prints can be considered as the print setting instruction. With the function of setting the above parameters on the digital camera, it is clear that an input is received on the operational panel on the camera to signal a necessity of printing or quantity of printing to the digital camera. The digital camera is considered as an external operating apparatus; see fig. 1; col. 1, ll. 18-26 and col. 6, ll. 1-56),

generating a plurality of interruption events including a print setting information interruption event for causing said host computer to set therein the print settings of the image data, the print setting information interruption event being generated in accordance with the print settings being set in said setting step (i.e. the digital camera is used to receive a printer instruction on the operation panel and this interruption event causes flags set for print settings and print necessity to be set. The print settings associated with the image data is then sent to the computer in order to be organized into an order file that will be sent to a network laboratory; see col. 6, ll. 3-64), and

wherein said method further includes a control method for said host computer comprising the steps of:

receiving the image data (i.e. in the system both the personal computer (4) and the order receiving apparatus (1) can be considered as a host computer. The personal computer (4) is able to receive image data from the digital camera. The input from the digital camera relates to information that was stored as a predetermined value before the information was input into the personal computer (4); see fig. 1; col. 7, ll. 1-66), and

generating print data corresponding to the print settings (i.e. the order information instructs the printer to generate print data corresponding to the order information (12) specified in the order file (10). Although a print control unit is not specified, the order receiving apparatus (1) is clearly the printer control unit since the instructions for the printer has to be recognized and processed by the order receiving apparatus (1) and the printer is controlled by the apparatus (1) in order to output the desired document of the user; see fig. 1; col. 7, ll. 1-66, col. 8, ll. 35- 66, col. 9, ll. 1, 2 and col. 10, ll. 17-33), and

wherein said method further includes a control method for said printer by which said printer prints the print data output from said host computer (i.e. the image and order files (9 and 10) are both used to reflect what the user desires to have printed by the printer (2) and this information has been outputted by the order receiving apparatus (1). Since the personal computer (4) sends information to the order receiving apparatus to be printed, this is considered as the host computer that outputted print data to the printer (2); see fig. 1; col. 7, ll. 1-66, col. 8, ll. 35- 66, col. 9, ll. 1, 2 and col. 10, ll. 17-33).

However, Ohtsuka '526 fails to teach wherein said external operating apparatus comprising the steps of: reading out image data from a detachable storage medium; operating a button to instruct said host computer to preview the image data read out in said reading step; transmitting the image data read out in said reading step, to said host computer in response to said button being operated; wherein method further includes a control method for said host computer, comprising the steps of: receiving the image data read out in said reading step and then transmitted in said transmitting step, and receiving the plurality of interruption events generated in said generating step; detecting

whether the interruption event is received in said receiving step is the setting information interruption event and controlling preview display such that the settings included in the received setting information interruption event is reflected in said image data received in said image data receiving step, every time the setting information interruption event is detected.

However, this is well known in the art as evidenced by Niikawa '500. Niikawa '500 discloses wherein said external operating apparatus comprises:

reading out image data from a detachable storage medium (i.e. like the system of Ohtsuka, the reference of Niikawa comprises a camera communicating with a computer and the computer is connected to a printing device for printing (same field of endeavor). However, the card I/F (212) is used to read image data from the memory card (8), which is considered as a detachable storage medium; see col. 6, ll. 9-13);

operating a button to instruct said host computer to preview the image data read out in said reading step (i.e. when the user presses the shutter button (9), this action creates a preview of the image on the computer screen of the Pc (1000). Since the shutter button operates in a manner analogous to the preview button, the above claim feature is performed; see col. 6, ll. 46 – col. 8, ll. 8 and col. 10, ll. 1-11);

transmitting the image data read out in said reading step, to said host computer in response to said button being operated (i.e. in the system, the digital camera (1) can connected to the PC (1000) and it is able to transmit image data read out from its memory and an interruption event notifying the PC (1000) of the connection to the PC to the digital camera. The communication I/F (213) is used to transmit image data read

out to the computer connected to the camera. When the user presses the shutter button (9), this action creates a preview of the image on the computer screen of the Pc (1000). Since the shutter button operates in a manner analogous to the preview button, the above claim feature is performed; see col. 6, ll. 46 – col. 8, ll. 8 and col. 10, ll. 1-11);

wherein method further includes a control method for said host computer, comprising the steps of: receiving the image data read out in said reading step and then transmitted in said transmitting step, and receiving the plurality of interruption events generated in said generating step (i.e. in the system, the host computer is able to receive image data from the digital camera once the camera reads image data from the memory card (8) and transmits this information to the computer through the communication I/F (213); see col. 6, ll. 9-13);

detecting whether the interruption event is received in said receiving step is the setting information interruption event (i.e. in the system, the camera can send an interruption event regarding the updating of the image in the camera. If the image in the camera is changed, this is reflected in the PC's monitor. Also, the computer can receive information regarding the setting changes of the image data from the computer input devices; see col. 7, ll. 60-col. 8, ll. 20) and controlling preview display such that the settings included in the received setting information interruption event is reflected in said image data received in said image data receiving step, every time the setting information interruption event is detected (i.e. in the PC, the monitor is updated in the change of the display when the color balance is adjusted in the system. The monitor of the PC being updated occurs in order to confirm the setting changes on the images.

Also, the system is able to reflect the update of the image that may have changed due to movement of the camera or a different image being taken with different scene information. This is shown in the camera and the updated screen in the computer; see fig. 12; col. 7, ll. 42 - col. 9, ll. 41).

Therefore, in view of Niikawa '500, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of wherein said external operating apparatus comprising the steps of: reading out image data from a detachable storage medium; operating a button to instruct said host computer to preview the image data read out in said reading step; transmitting the image data read out in said reading step, to said host computer in response to said button being operated; wherein method further includes a control method for said host computer, comprising the steps of: receiving the image data read out in said reading step and then transmitted in said transmitting step, and receiving the plurality of interruption events generated in said generating step; detecting whether the interruption event is received in said receiving step is the setting information interruption event and controlling preview display such that the settings included in the received setting information interruption event is reflected in said image data received in said image data receiving step, every time the setting information interruption event is detected, incorporated in the device of Ohtsuka '526, in order to have a digital camera contain a communication interface to communicate with a PC (as stated in Niikawa '500 col. 6, ll. 9-13).

However, the references of Ohtsuka '526 and Niikawa '500 fail to specifically teach generating a plurality of interruption events including a printer setting information

interruption event for causing said host computer to set therein the print settings of the image data transmitted in said transmitting step, the print setting information interruption event being generated in accordance with the print settings being set in said setting step after the image data read out in said reading step is transmitted to said host computer in said transmitting step so that the generated print setting information interruption event is transmitted to said host computer.

However, this is well known in the art as evidenced by Niikawa '618. Niikawa '618 discloses generating a plurality of interruption events including a printer setting information interruption event for causing said host computer to set therein the print settings of the image data transmitted in said transmitting step, the print setting information interruption event being generated in accordance with the print settings being set in said setting step after the image data read out in said reading step is transmitted to said host computer in said transmitting step so that the generated print setting information interruption event is transmitted to said host computer (i.e. like the above applied references, the Niikawa '618 reference comprises a camera to send instructions and events to a computer and the computer is connected to a printer for printing (same field of endeavor). However, unlike Niikawa '500, Niikawa '618 discloses specifically sending an instruction from the camera operation panel to the computer after image data has been sent to the computer. As shown in figure 15, function keys can be registered to perform the features of displaying image data in a PC or execute an application in the personal computer. The user of the camera can set a function key to transmit image data to a PC and once the button is pressed, the key is able to

perform this feature. Then the user can set another function key to perform a feature of displaying this data on the PC monitor. The system can also assign a function key for executing an application on the PC and the application on the PC can be similar to the color adjusting program performed in the Niikawa '500 reference. The above is an example of sending an instruction to the PC after the image data is sent to a computer. It is also understood that the controller of the camera is used to generate the interruption event associated with the function keys. With the Ohtsuka reference modified by the references of Niikawa '500 and '618, the above claim limitation is performed; see fig. 15; col. 2-67).

Therefore, in view of Niikawa '618, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of generating a plurality of interruption events including a printer setting information interruption event for causing said host computer to set therein the print settings of the image data transmitted in said transmitting step, the print setting information interruption event being generated in accordance with the print settings being set in said setting step after the image data read out in said reading step is transmitted to said host computer in said transmitting step so that the generated print setting information interruption event is transmitted to said host computer, incorporated in the device of Ohtsuka '526, as modified by the features of Niikawa '500, in order to have the live-view image being taken by the camera to be displayed on the monitor of the personal computer (as stated in Niikawa '618 col. 1, ll. 19-32).

However, the combination of Ohtsuka '526 in view of Niikawa '500 and Niikawa '618 fails to specifically teach a control unit which detects whether the interruption event received by said receiving unit is the print setting information interruption event, and controls print preview display such that the print settings included in the received print setting information interruption event are reflected in the image data, every time the print setting information interruption event is detected, and the print settings included in the received print setting information interruption event, wherein the print settings reflected in the print preview display are the same print settings used to generate print data.

However, this is well known in the art as evidenced by Nakajima '687. Nakajima '687 discloses a control unit which detects whether the interruption event received by said receiving unit is the print setting information interruption event, and controls print preview display such that the print settings included in the received print setting information interruption event are reflected in the image data, every time the print setting information interruption event is detected (i.e. in Nakajima, a computer is able to receive an event from the user interface of the digital camera and this transmission includes the settings that will be used to output the image data on the computer, which can then be forwarded to a printing device. The image data is read by the processing device within the computer and the different image settings can be automatically applied to the image data. Once these settings are applied to the image data, the processed image data can be reflected in the display of the computer. Every time the user sends image data over to the computer device, the application software used to perform the

graphics processing checks to see if graphics processing control information is included in the image data sent to the computer; see ¶ [0056]-[0062], [0088]-[0091] and [0107]-[0111]),

the print settings included in the received print setting information interruption event, wherein the print settings reflected in the print preview display are the same print settings used to generate print data (i.e. in the system, the graphics processing settings that are reflected in the graphics processing control information are the same settings that are reflected in the computer display. Moreover, these same settings are going to be used in printing the image in order for the image to reflect the exact settings input by the user; ¶ [0006]-[0011]).

Therefore, in view of Nakajima '687, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of a control unit which detects whether the interruption event received by said receiving unit is the print setting information interruption event, and controls print preview display such that the print settings included in the received print setting information interruption event are reflected in the image data, every time the print setting information interruption event is detected, and the print settings included in the received print setting information interruption event, wherein the print settings reflected in the print preview display are the same print settings used to generate print data, incorporated in the device of Ohtsuka '526, as modified by the references of Niikawa '500 and Niikawa '618 in order to enable graphics processing to be performed to graphics data that accounts for the generation condition(s) (as stated in Nakajima '687 ¶ [0008]).

Re claim 15: Ohtsuka '526 discloses a method of controlling an information processing apparatus which can communicate with an external operating apparatus including a display unit which displays a print setting screen (i.e. the digital camera used contains a monitor on the camera that displays setting value choices regarding print settings; see col. 6, ll. 1-56); an operation panel which is operative to set print settings in accordance with a print setting instruction provided by a user based on the print setting screen displayed on said display unit (i.e. in the system, the digital camera has an operational panel, which allows the user to see the picture that has been photographed and also allows the user to set order information in regards to the necessity of printing and the quantity of prints desired by the user. The quantity of prints can be considered as the print setting instruction. With the function of setting the above parameters on the digital camera, it is clear that an input is received on the operational panel on the camera to signal a necessity of printing or quantity of printing to the digital camera. The digital camera is considered as an external operating apparatus; see fig. 1; col. 1, ll. 18-26 and col. 6, ll. 1-56), a controller in accordance with said operation panel receiving the print setting instruction (i.e. the digital camera is used to receive a printer instruction on the operation panel and this interruption event causes flags set for print settings and print necessity to be set; see col. 6, ll. 3-64) so to cause it to reflect a print setting corresponding to the print setting instruction received by said operation panel in the image data (i.e. each time the digital camera (3) is used to perform a certain function, a signal is sent in the CPU of the digital camera system that corresponds to a certain

function. This is clear in any computational device, that an interrupt, or signal of some kind, is generated that corresponds with a certain function in the system of a computational device. In the current example of the digital camera, when the function of setting a print necessity is made, a print flag is set to 1 each time a print necessity is made in regards to a picture desired to be printed. This is an example of generating an interruption event when an instruction is made at the digital camera. In regards to the instruction of the quantity of prints that is analogous to the print setting instruction, when the flag of the necessity of printing is set to 1, setting values relating the quantity or size of prints, are selected by a button on the digital camera each time this setting is desired. Once the key is pressed to select a certain setting, this generates an interrupt in the system of the camera signifying that the user has chosen a certain value or setting each time the value or setting is made at the digital camera (3); see fig. 1; col. 1, ll. 18-26 and col. 6, ll. 1-56), said method comprising the steps of:

performing by the information processing apparatus the following:

receiving the image data and the plurality of interruption events (i.e. in the system both the personal computer (4) and the order receiving apparatus (1) can be considered as a host computer. The personal computer (4) is able to receive image data from the digital camera. The input from the digital camera relates to information that was stored as a predetermined value before the information was input into the personal computer (4); see fig. 1; col. 7, ll. 1-66), and

generating print data corresponding to the print setting (i.e. the order information instructs the printer to generate print data corresponding to the order information (12)

specified in the order file (10). Although a print control unit is not specified, the order receiving apparatus (1) is clearly the printer control unit since the instructions for the printer has to be recognized and processed by the order receiving apparatus (1) and the printer is controlled by the apparatus (1) in order to output the desired document of the user; see fig. 1; col. 7, ll. 1-66, col. 8, ll. 35- 66, col. 9, ll. 1, 2 and col. 10, ll. 17-33), and

and outputting the generated print data to said printer (i.e. the image and order files (9 and 10) are both used to reflect what the user desires to have printed by the printer (2) and this information has been outputted by the order receiving apparatus (1). Since the personal computer (4) sends information to the order receiving apparatus to be printed, this is considered as the host computer that outputted print data to the printer (2); see fig. 1; col. 7, ll. 1-66, col. 8, ll. 35- 66, col. 9, ll. 1, 2 and col. 10, ll. 17-33).

However, Ohtsuka '526 fails to teach wherein said external operating apparatus including reading means for reading out image data from a detachable storage medium; a preview button operative to instruct said host computer to preview the image data read out by said reading means; transmitting means for transmitting the image data read out by said reading means, to said information processing apparatus in response to said preview button being operated; receiving the image data and the plurality of interruption events transmitted from said external operating apparatus, detecting whether the setting information interruption event is received in said receiving step and controlling the preview display such that the settings included in the received setting information interruption event are reflected in said image data received in said image data receiving step, every time the setting information interruption event is detected.

However, this is well known in the art as evidenced by Niikawa '500. Niikawa '500 discloses wherein said external operating apparatus including reading means for reading out image data from a detachable storage medium (i.e. like the system of Ohtsuka, the reference of Niikawa comprises a camera communicating with a computer and the computer is connected to a printing device for printing (same field of endeavor). However, the card I/F (212) is used to read image data from the memory card (8), which is considered as a detachable storage medium; see col. 6, ll. 9-13);

a preview button operative to instruct said host computer to preview the image data read out by said reading means (i.e. when the user presses the shutter button (9), this action creates a preview of the image on the computer screen of the Pc (1000). Since the shutter button operates in a manner analogous to the preview button, the above claim feature is performed; see col. 6, ll. 46 – col. 8, ll. 8 and col. 10, ll. 1-11);

transmission means for transmitting the image data read out by said reading means, to said information processing apparatus in response to said preview button being operated (i.e. in the system, the digital camera (1) can connected to the PC (1000) and it is able to transmit image data read out from its memory and an interruption event notifying the PC (1000) of the connection to the PC to the digital camera. The communication I/F (213) is used to transmit image data read out to the computer connected to the camera. When the user presses the shutter button (9), this action creates a preview of the image on the computer screen of the Pc (1000). Since the shutter button operates in a manner analogous to the preview button, the above claim feature is performed; see col. 6, ll. 46 – col. 8, ll. 8 and col. 10, ll. 1-11);

receiving the image data and the plurality of interruption events transmitted from said external operating apparatus (i.e. in the system, the camera can send an interruption event regarding the update of the image in the camera. If the image in the camera is changed, this is reflected in the PC's monitor and the update of the image sent to computer is considered an interruption event; see col. 7, ll. 60-col. 8, ll. 20) and

detecting whether the setting information interruption event is received in said receiving step (i.e. in the system, the camera can send an interruption event regarding the updating of the image in the camera. If the image in the camera is changed, this is reflected in the PC's monitor. Also, the computer can receive information regarding the setting changes of the image data from the computer input devices; see col. 7, ll. 60-col. 8, ll. 20) and controlling the preview display such that the settings included in the received setting information interruption event are reflected in said image data received in said image data receiving step, every time the setting information interruption event is detected (i.e. in the PC, the monitor is updated in the change of the display when the color balance is adjusted in the system. The monitor of the PC being updated occurs in order to confirm the setting changes on the images. Also, the system is able to reflect the update of the image that may have changed due to movement of the camera or a different image being taken with different scene information. This is shown in the camera and the updated screen in the computer; see fig. 12; col. 7, ll. 42 - col. 9, ll. 41).

Therefore, in view of Niikawa '500, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of wherein reading means for reading out image data from a detachable storage medium; a preview button

operative to instruct said host computer to preview the image data read out by said reading means; transmitting means for transmitting the image data read out by said reading means, to said information processing apparatus in response to said preview button being operated, a receiving unit which receives transmitted from said external operating apparatus, effecting a preview display in which the print setting is reflected in the image data received by said receiving unit, incorporated in the device of Ohtsuka '526, in order to have a digital camera contain a communication interface to communicate with a PC (as stated in Niikawa '500 col. 6, ll. 9-13).

However, the references of Ohtsuka '526 and Niikawa '500 fail to specifically teach a controller for generating a plurality of interruption events including a print setting information interruption event for causing said information processing apparatus to set therein the print settings of the image data transmitted by said transmission means, the print setting information interruption event being generated in accordance with said operation panel setting the print settings after the image data read out by said reading means is transmitted to said information processing apparatus by said transmission means so that the generated print setting information interruption event is transmitted to said information processing apparatus.

However, this is well known in the art as evidenced by Niikawa '618. Niikawa '618 discloses a controller for generating a plurality of interruption events including a print setting information interruption event for causing said information processing apparatus to set therein the print settings of the image data transmitted by said transmission means, the print setting information interruption event being generated in

accordance with said operation panel setting the print settings after the image data read out by said reading means is transmitted to said information processing apparatus by said transmission means so that the generated print setting information interruption event is transmitted to said information processing apparatus (i.e. like the above applied references, the Niikawa ‘618 reference comprises a camera to send instructions and events to a computer and the computer is connected to a printer for printing (same field of endeavor). However, unlike Niikawa ‘500, Niikawa ‘618 discloses specifically sending an instruction from the camera operation panel to the computer after image data has been sent to the computer. As shown in figure 15, function keys can be registered to perform the features of displaying image data in a PC or execute an application in the personal computer. The user of the camera can set a function key to transmit image data to a PC and once the button is pressed, the key is able to perform this feature. Then the user can set another function key to perform a feature of displaying this data on the PC monitor. The system can also assign a function key for executing an application on the PC and the application on the PC can be similar to the color adjusting program performed in the Niikawa '500 reference. The above is an example of sending an instruction to the PC after the image data is sent to a computer. It is also understood that the controller of the camera is used to generate the interruption event associated with the function keys. With the Ohtsuka reference modified by the references of Niikawa ‘500 and ‘618, the above claim limitation is performed; see fig. 15; col. 2-67).

Therefore, in view of Niikawa ‘618, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of a controller for generating a plurality of interruption events including a print setting information interruption event for causing said information processing apparatus to set therein the print settings of the image data transmitted by said transmission means, the print setting information interruption event being generated in accordance with said operation panel setting the print settings after the image data read out by said reading means is transmitted to said information processing apparatus by said transmission means so that the generated print setting information interruption event is transmitted to said information processing apparatus, incorporated in the device of Ohtsuka ‘526, as modified by the features of Niikawa ‘500, in order to have the live-view image being taken by the camera to be displayed on the monitor of the personal computer (as stated in Niikawa ‘618 col. 1, ll. 19-32).

However, the combination of Ohtsuka '526 in view of Niikawa ‘500 and Niikawa ‘618 fails to specifically teach the generated print setting information interruption event includes the print settings set by said operation panel, detecting whether the print setting information interruption event is received in said receiving step and controlling the preview display such that the print settings included in the received print setting information interruption event are reflected in the image data received in said receiving step, every time the print setting information interruption event is detected, and the print settings included in the received print setting information interruption event, wherein the

print settings reflected in the print preview display are the same print settings used to generate print data.

However, this is well known in the art as evidenced by Nakajima '687. Nakajima '687 discloses the generated print setting information interruption event includes the print settings set by said operation panel (i.e. the system of Nakajima '687, like Niikawa '500 and '618, contains a camera to send instructions and events to a computer and the computer is connected to a printer for printing (same field of endeavor). However, in Nakajima, the reference discloses a user setting different graphic processing control information for graphics data that is comprised of photo data taken. Once the user sets this information, the user is able to send the whole graphics file (GF) to an output device, such as a computer, that is able to perform the graphics processing similar to the printing device mentioned in the Nakajima reference; see ¶ [0056]-[0062] and [0107]-[0111]),

detecting whether the print setting information interruption event is received in said receiving step and controlling the preview display such that the print settings included in the received print setting information interruption event are reflected in the image data received in said receiving step, every time the print setting information interruption event is detected (i.e. in Nakajima, a computer is able to receive an event from the user interface of the digital camera and this transmission includes the settings that will be used to output the image data on the computer, which can then be forwarded to a printing device. The image data is read by the processing device within the computer and the different image settings can be automatically applied to the image

data. Once these settings are applied to the image data, the processed image data can be reflected in the display of the computer. Every time the user sends image data over to the computer device, the application software used to perform the graphics processing checks to see if graphics processing control information is included in the image data sent to the computer; see ¶ [0056]-[0062], [0088]-[0091] and [0107]-[0111]),

the print settings included in the received print setting information interruption event, wherein the print settings reflected in the print preview display are the same print settings used to generate print data (i.e. in the system, the graphics processing settings that are reflected in the graphics processing control information are the same settings that are reflected in the computer display. Moreover, these same settings are going to be used in printing the image in order for the image to reflect the exact settings input by the user; ¶ [0006]-[0011]).

Therefore, in view of Nakajima '687, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of the generated print setting information interruption event includes the print settings set by said operation panel, detecting whether the print setting information interruption event is received in said receiving step and controlling the preview display such that the print settings included in the received print setting information interruption event are reflected in the image data received in said receiving step, every time the print setting information interruption event is detected, and the print settings included in the received print setting information interruption event, wherein the print settings reflected in the print preview display are the same print settings used to generate print data, incorporated in the

device of Ohtsuka '526, as modified by the references of Niikawa ‘500 and Niikawa ‘618 in order to enable graphics processing to be performed to graphics data that accounts for the generation condition(s) (as stated in Nakajima ‘687 ¶ [0008]).

Re claim 16: Ohtsuka '526 discloses a program stored on a computer-readable recording medium, for causing a computer to execute a method of controlling a print system comprising an external operating apparatus, a host computer which communicates with said external operating apparatus, and a printer which communicates with said host computer,

wherein said method includes a control method for said external operating apparatus and comprises, the steps of:

displaying a print setting screen on a display unit (i.e. the digital camera used contains a monitor on the camera that displays setting value choices regarding print settings; see col. 6, ll. 1-56);

setting, with an operation panel, print settings in accordance with a print setting instruction provided by a user based on the print setting screen displayed on said display unit (i.e. in the system, the digital camera has an operational panel, which allows the user to see the picture that has been photographed and also allows the user to set order information in regards to the necessity of printing and the quantity of prints desired by the user. The quantity of prints can be considered as the print setting instruction. With the function of setting the above parameters on the digital camera, it is clear that an input is received on the operational panel on the camera to signal a necessity of

printing or quantity of printing to the digital camera. The digital camera is considered as an external operating apparatus; see fig. 1; col. 1, ll. 18-26 and col. 6, ll. 1-56),

generating a plurality of interruption events including a print setting information interruption event for causing a host computer to set therein the print settings of the image data, the print setting information interruption event being generated in accordance with the print settings being set in said setting step (i.e. the digital camera is used to receive a printer instruction on the operation panel and this interruption event causes flags set for print settings and print necessity to be set. The flags are then read by the host computer in order to set the print settings and other image data together in an order file before being transmitted to another device on a network; see col. 6, ll. 3-64), and

wherein said method further includes a control method for said host computer comprising the steps of:

receiving the image data read out in said reading step, and receiving the plurality of interruption events generated in said generating step (i.e. in the system both the personal computer (4) and the order receiving apparatus (1) can be considered as a host computer. The personal computer (4) is able to receive image data from the digital camera. The input from the digital camera relates to information that was stored as a predetermined value before the information was input into the personal computer (4); see fig. 1; col. 7, ll. 1-66), and

generating print data corresponding to the print setting (i.e. the order information instructs the printer to generate print data corresponding to the order information (12)

specified in the order file (10). Although a print control unit is not specified, the order receiving apparatus (1) is clearly the printer control unit since the instructions for the printer has to be recognized and processed by the order receiving apparatus (1) and the printer is controlled by the apparatus (1) in order to output the desired document of the user; see fig. 1; col. 7, ll. 1-66, col. 8, ll. 35- 66, col. 9, ll. 1, 2 and col. 10, ll. 17-33), and

wherein said method further includes a control method for said printer by which said printer prints the print data output from said host computer (i.e. the image and order files (9 and 10) are both used to reflect what the user desires to have printed by the printer (2) and this information has been outputted by the order receiving apparatus (1). Since the personal computer (4) sends information to the order receiving apparatus to be printed, this is considered as the host computer that outputted print data to the printer (2); see fig. 1; col. 7, ll. 1-66, col. 8, ll. 35- 66, col. 9, ll. 1, 2 and col. 10, ll. 17-33).

However, Ohtsuka '526 fails to teach wherein said external operating apparatus comprising the steps of: reading out image data from a detachable storage medium; operating a button to instruct said host computer to preview the image data read out by said reading means; transmitting the image data read out in said reading step, to said host computer in response to said button being operated; wherein said method further includes a control method for said host computer and comprising the steps of: receiving the image data read out in said reading step and then transmitted in said transmitting step, and receiving the plurality of interruption events generated in said generating step; detecting whether the interruption event is received in said receiving step is the print setting information interruption event and controls the preview display such that the

settings included in the received setting information interruption event are reflected in the image data received in said image data receiving step, every time the setting information interruption event is detected.

However, this is well known in the art as evidenced by Niikawa '500. Niikawa '500 discloses wherein said external operating apparatus comprises:

reading out image data from a detachable storage medium (i.e. like the system of Ohtsuka, the reference of Niikawa comprises a camera communicating with a computer and the computer is connected to a printing device for printing (same field of endeavor). However, the card I/F (212) is used to read image data from the memory card (8), which is considered as a detachable storage medium; see col. 6, ll. 9-13);

operating a button to instruct said host computer to preview the image data read out in said reading step (i.e. when the user presses the shutter button (9), this action creates a preview of the image on the computer screen of the Pc (1000). Since the shutter button operates in a manner analogous to the preview button, the above claim feature is performed; see col. 6, ll. 46 – col. 8, ll. 8 and col. 10, ll. 1-11);

transmitting the image data read out in said reading step, to said host computer in response to said button being operated (i.e. in the system, the digital camera (1) can connected to the PC (1000) and it is able to transmit image data read out from its memory and an interruption event notifying the PC (1000) of the connection to the PC to the digital camera. The communication I/F (213) is used to transmit image data read out to the computer connected to the camera. When the user presses the shutter button (9), this action creates a preview of the image on the computer screen of the Pc

(1000). Since the shutter button operates in a manner analogous to the preview button, the above claim feature is performed; see col. 6, ll. 46 – col. 8, ll. 8 and col. 10, ll. 1-11);

wherein said method further includes a control method for said host computer and comprising the steps of: receiving the image data read out in said reading step and then transmitted in said transmitting step, and receiving the plurality of interruption events generated in said generating step (i.e. in the system, the host computer is able to receive image data from the digital camera once the camera reads image data from the memory card (8) and transmits this information to the computer through the communication I/F (213). The host computer is also able to receive multiple inputs from the connected camera device; see col. 6, ll. 9-13);

detecting whether the interruption event is received in said receiving step is the print setting information interruption event (i.e. in the system, the camera can send an interruption event regarding the updating of the image in the camera. If the image in the camera is changed, this is reflected in the PC's monitor. Also, the computer can receive information regarding the setting changes of the image data from the computer input devices; see col. 7, ll. 60-col. 8, ll. 20) and controls the preview display such that the settings included in the received setting information interruption event are reflected in the image data received in said image data receiving step, every time the setting information interruption event is detected (i.e. in the PC, the monitor is updated in the change of the display when the color balance is adjusted in the system. The monitor of the PC being updated occurs in order to confirm the setting changes on the images. Also, the system is able to reflect the update of the image that may have changed due

to movement of the camera or a different image being taken with different scene information. This is shown in the camera and the updated screen in the computer; see fig. 12; col. 7, ll. 42 - col. 9, ll. 41).

Therefore, in view of Niikawa '500, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of wherein said external operating apparatus comprising the steps of: reading out image data from a detachable storage medium; operating a button to instruct said host computer to preview the image data read out by said reading means; transmitting the image data read out in said reading step, to said host computer in response to said button being operated; wherein said method further includes a control method for said host computer and comprising the steps of: receiving the image data read out in said reading step and then transmitted in said transmitting step, and receiving the plurality of interruption events generated in said generating step; detecting whether the interruption event is received in said receiving step is the print setting information interruption event and controls the preview display such that the settings included in the received setting information interruption event are reflected in the image data received in said image data receiving step, every time the setting information interruption event is detected, incorporated in the device of Ohtsuka '526, in order to have a digital camera contain a communication interface to communicate with a PC (as stated in Niikawa '500 col. 6, ll. 9-13).

However, the references of Ohtsuka '526 and Niikawa '500 fail to specifically teach generating a plurality of interruption events including a print setting information interruption event for causing said host computer to set therein the print settings of the

image data transmitted by said transmission means, the print setting information interruption event being generated in accordance with said operation panel setting the print settings after the image data read out by said reading means is transmitted to said information processing apparatus by said transmission means so that the generated print setting information interruption event is transmitted to said host computer.

However, this is well known in the art as evidenced by Niikawa '618. Niikawa '618 discloses generating a plurality of interruption events including a print setting information interruption event for causing said host computer to set therein the print settings of the image data transmitted by said transmission means, the print setting information interruption event being generated in accordance with said operation panel setting the print settings after the image data read out by said reading means is transmitted to said information processing apparatus by said transmission means so that the generated print setting information interruption event is transmitted to said host computer (i.e. like the above applied references, the Niikawa '618 reference comprises a camera to send instructions and events to a computer and the computer is connected to a printer for printing (same field of endeavor). However, unlike Niikawa '500, Niikawa '618 discloses specifically sending an instruction from the camera operation panel to the computer after image data has been sent to the computer. As shown in figure 15, function keys can be registered to perform the features of displaying image data in a PC or execute an application in the personal computer. The user of the camera can set a function key to transmit image data to a PC and once the button is pressed, the key is able to perform this feature. Then the user can set another function key to perform a

feature of displaying this data on the PC monitor. The system can also assign a function key for executing an application on the PC and the application on the PC can be similar to the color adjusting program performed in the Niikawa '500 reference. The above is an example of sending an instruction to the PC after the image data is sent to a computer. It is also understood that the controller of the camera is used to generate the interruption event associated with the function keys. With the Ohtsuka reference modified by the references of Niikawa ‘500 and ‘618, the above claim limitation is performed; see fig. 15; col. 2-67).

Therefore, in view of Niikawa ‘618, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of generating a plurality of interruption events including a print setting information interruption event for causing said host computer to set therein the print settings of the image data transmitted by said transmission means, the print setting information interruption event being generated in accordance with said operation panel setting the print settings after the image data read out by said reading means is transmitted to said information processing apparatus by said transmission means so that the generated print setting information interruption event is transmitted to said host computer, incorporated in the device of Ohtsuka ‘526, as modified by the features of Niikawa ‘500, in order to have the live-view image being taken by the camera to be displayed on the monitor of the personal computer (as stated in Niikawa ‘618 col. 1, ll. 19-32).

However, the combination of Ohtsuka '526 in view of Niikawa ‘500 and Niikawa ‘618 fails to specifically teach the generated print setting information interruption event

includes the print settings set by said operation panel, detecting whether the interruption event received in said receiving step is the print setting information interruption event and controls the preview display such that the print settings included in the received print setting information interruption event are reflected in the image data received in said image data receiving step, every time the print setting information interruption event is detected, and the print settings included in the received print setting information interruption event, wherein the print settings reflected in the print preview display are the same print settings used to generate print data.

However, this is well known in the art as evidenced by Nakajima '687. Nakajima '687 discloses the generated print setting information interruption event includes the print settings set by said operation panel (i.e. the system of Nakajima '687, like Niikawa '500 and '618, contains a camera to send instructions and events to a computer and the computer is connected to a printer for printing (same field of endeavor). However, in Nakajima, the reference discloses a user setting different graphic processing control information for graphics data that is comprised of photo data taken. Once the user sets this information, the user is able to send the whole graphics file (GF) to an output device, such as a computer, that is able to perform the graphics processing similar to the printing device mentioned in the Nakajima reference; see ¶ [0056]-[0062] and [0107]-[0111]),

detecting whether the interruption event received in said receiving step is the print setting information interruption event and controls the preview display such that the print settings included in the received print setting information interruption event are

reflected in the image data received in said image data receiving step, every time the print setting information interruption event is detected (i.e. in Nakajima, a computer is able to receive an event from the user interface of the digital camera and this transmission includes the settings that will be used to output the image data on the computer, which can then be forwarded to a printing device. The image data is read by the processing device within the computer and the different image settings can be automatically applied to the image data. Once these settings are applied to the image data, the processed image data can be reflected in the display of the computer. Every time the user sends image data over to the computer device, the application software used to perform the graphics processing checks to see if graphics processing control information is included in the image data sent to the computer; see ¶ [0056]-[0062], [0088]-[0091] and [0107]-[0111]),

the print settings included in the received print setting information interruption event, wherein the print settings reflected in the print preview display are the same print settings used to generate print data (i.e. in the system, the graphics processing settings that are reflected in the graphics processing control information are the same settings that are reflected in the computer display. Moreover, these same settings are going to be used in printing the image in order for the image to reflect the exact settings input by the user; ¶ [0006]-[0011]).

Therefore, in view of Nakajima '687, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of the generated print setting information interruption event includes the print settings set by said

operation panel, detecting whether the interruption event received in said receiving step is the print setting information interruption event and controls the preview display such that the print settings included in the received print setting information interruption event are reflected in the image data received in said image data receiving step, every time the print setting information interruption event is detected, and the print settings included in the received print setting information interruption event, wherein the print settings reflected in the print preview display are the same print settings used to generate print data, incorporated in the device of Ohtsuka '526, as modified by the references of Niikawa ‘500 and Niikawa ‘618 in order to enable graphics processing to be performed to graphics data that accounts for the generation condition(s) (as stated in Nakajima ‘687 ¶ [0008]).

Re claim 18: Ohtsuka '526 discloses a program stored on a computer-readable medium, for causing a computer to execute a method of controlling an information processing apparatus which can communicate with an external operating apparatus including a display unit which displays a print setting screen (i.e. the digital camera used contains a monitor on the camera that displays setting value choices regarding print settings; see col. 6, ll. 1-56); an operation panel which is operative to set print settings in accordance with a print setting instruction provided by a user based on the print setting screen displayed on said display unit (i.e. in the system, the digital camera has an operational panel, which allows the user to see the picture that has been photographed and also allows the user to set order information in regards to the necessity of printing and the

quantity of prints desired by the user. The quantity of prints can be considered as the print setting instruction. With the function of setting the above parameters on the digital camera, it is clear that an input is received on the operational panel on the camera to signal a necessity of printing or quantity of printing to the digital camera. The digital camera is considered as an external operating apparatus; see fig. 1; col. 1, ll. 18-26 and col. 6, ll. 1-56), a controller for generating a plurality of interruption events including a print setting information interruption event for causing said information processing apparatus to set therein the print settings of the image data, the print setting information interruption event being generated in accordance with said operation panel setting the print settings (i.e. the digital camera is used to receive a printer instruction on the operation panel and this interruption event causes flags set for print settings and print necessity to be set. The flags are then read by the host computer in order to set the print settings and other image data together in an order file before being transmitted to another device on a network; see col. 6, ll. 3-64), and a printer, said apparatus comprising:

a receiving unit which receives the image data (i.e. in the system both the personal computer (4) and the order receiving apparatus (1) can be considered as a host computer. The personal computer (4) is able to receive image data from the digital camera. The input from the digital camera relates to information that was stored as a predetermined value before the information was input into the personal computer (4); see fig. 1; col. 7, ll. 1-66), and

a print control unit which generates print data corresponding to the print setting (i.e. the order information instructs the printer to generate print data corresponding to the order information (12) specified in the order file (10). Although a print control unit is not specified, the order receiving apparatus (1) is clearly the printer control unit since the instructions for the printer has to be recognized and processed by the order receiving apparatus (1) and the printer is controlled by the apparatus (1) in order to output the desired document of the user; see fig. 1; col. 7, ll. 1-66, col. 8, ll. 35- 66, col. 9, ll. 1, 2 and col. 10, ll. 17-33), and

and outputting the generated print data to said printer (i.e. the image and order files (9 and 10) are both used to reflect what the user desires to have printed by the printer (2) and this information has been outputted by the order receiving apparatus (1). Since the personal computer (4) sends information to the order receiving apparatus to be printed, this is considered as the host computer that outputted print data to the printer (2); see fig. 1; col. 7, ll. 1-66, col. 8, ll. 35- 66, col. 9, ll. 1, 2 and col. 10, ll. 17-33).

However, Ohtsuka '526 fails to teach wherein said external operating apparatus including reading means for reading out image data from a detachable storage medium; a preview button operative to instruct said host computer to preview the image data read out by said reading means; transmitting means for transmitting the image data read out by said reading means, to said information processing apparatus in response to said preview button being operated; receiving the image data and the plurality of interruption events transmitted from said external operating apparatus; detecting whether the setting information interruption event is received in said receiving step and

controlling the preview display such that the settings included in the received setting information interruption event are reflected in the image data received in said receiving step, every time the setting information interruption event is detected.

However, this is well known in the art as evidenced by Niikawa '500. Niikawa '500 discloses wherein said external operating apparatus including reading means for reading out image data from a detachable storage medium (i.e. like the system of Ohtsuka, the reference of Niikawa comprises a camera communicating with a computer and the computer is connected to a printing device for printing (same field of endeavor). However, the card I/F (212) is used to read image data from the memory card (8), which is considered as a detachable storage medium; see col. 6, ll. 9-13);

a preview button operative to instruct said host computer to preview the image data read out by said reading means (i.e. when the user presses the shutter button (9), this action creates a preview of the image on the computer screen of the Pc (1000). Since the shutter button operates in a manner analogous to the preview button, the above claim feature is performed; see col. 6, ll. 46 – col. 8, ll. 8 and col. 10, ll. 1-11);

transmission means for transmitting the image data read out by said reading means, to said host computer in response to said preview button being operated (i.e. in the system, the digital camera (1) can connected to the PC (1000) and it is able to transmit image data read out from its memory and an interruption event notifying the PC (1000) of the connection to the PC to the digital camera. The communication I/F (213) is used to transmit image data read out to the computer connected to the camera. When the user presses the shutter button (9), this action creates a preview of the image

on the computer screen of the Pc (1000). Since the shutter button operates in a manner analogous to the preview button, the above claim feature is performed; see col. 6, ll. 46 – col. 8, ll. 8 and col. 10, ll. 1-11);

receiving the image data and the plurality of interruption events transmitted from said external operating apparatus (i.e. in the system, the host computer is able to receive image data from the digital camera once the camera reads image data from the memory card (8) and transmits this information to the computer through the communication I/F (213). The host computer is also able to receive multiple inputs from the connected camera device; see col. 6, ll. 9-13);

detecting whether the setting information interruption event is received in said receiving step (i.e. in the system, the camera can send an interruption event regarding the updating of the image in the camera. If the image in the camera is changed, this is reflected in the PC's monitor. Also, the computer can receive information regarding the setting changes of the image data from the computer input devices; see col. 7, ll. 60-col. 8, ll. 20) and controlling the preview display such that the settings included in the received setting information interruption event are reflected in the image data received in said receiving step, every time the setting information interruption event is detected (i.e. in the PC, the monitor is updated in the change of the display when the color balance is adjusted in the system. The monitor of the PC being updated occurs in order to confirm the setting changes on the images. Also, the system is able to reflect the update of the image that may have changed due to movement of the camera or a

different image being taken with different scene information. This is shown in the camera and the updated screen in the computer; see fig. 12; col. 7, ll. 42 - col. 9, ll. 41).

Therefore, in view of Niikawa '500, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of wherein said external operating apparatus including reading means for reading out image data from a detachable storage medium; a preview button operative to instruct said host computer to preview the image data read out by said reading means; transmitting means for transmitting the image data read out by said reading means, to said information processing apparatus in response to said preview button being operated; receiving the image data and the plurality of interruption events transmitted from said external operating apparatus; detecting whether the setting information interruption event is received in said receiving step and controlling the preview display such that the settings included in the received setting information interruption event are reflected in the image data received in said receiving step, every time the setting information interruption event is detected, incorporated in the device of Ohtsuka '526, in order to have a digital camera contain a communication interface to communicate with a PC (as stated in Niikawa '500 col. 6, ll. 9-13).

However, the references of Ohtsuka '526 and Niikawa '500 fail to specifically teach a controller for generating a plurality of interruption events including a print setting information interruption event for causing said information processing apparatus to set therein the print settings of the image data transmitted by said transmission means, the print setting information interruption event being generated in accordance with said

operation panel setting the print settings after the image data read out by said reading means is transmitted to said information processing apparatus by said transmission means so that the generated print setting information interruption event is transmitted to said information processing apparatus.

However, this is well known in the art as evidenced by Niikawa '618. Niikawa '618 discloses a controller for generating a plurality of interruption events including a print setting information interruption event for causing said information processing apparatus to set therein the print settings of the image data transmitted by said transmission means, the print setting information interruption event being generated in accordance with said operation panel setting the print settings after the image data read out by said reading means is transmitted to said information processing apparatus by said transmission means so that the generated print setting information interruption event is transmitted to said information processing apparatus (i.e. like the above applied references, the Niikawa '618 reference comprises a camera to send instructions and events to a computer and the computer is connected to a printer for printing (same field of endeavor). However, unlike Niikawa '500, Niikawa '618 discloses specifically sending an instruction from the camera operation panel to the computer after image data has been sent to the computer. As shown in figure 15, function keys can be registered to perform the features of displaying image data in a PC or execute an application in the personal computer. The user of the camera can set a function key to transmit image data to a PC and once the button is pressed, the key is able to perform this feature. Then the user can set another function key to perform a feature of

displaying this data on the PC monitor. The system can also assign a function key for executing an application on the PC and the application on the PC can be similar to the color adjusting program performed in the Niikawa '500 reference. The above is an example of sending an instruction to the PC after the image data is sent to a computer. It is also understood that the controller of the camera is used to generate the interruption event associated with the function keys. With the Ohtsuka reference modified by the references of Niikawa ‘500 and ‘618, the above claim limitation is performed; see fig. 15; col. 2-67).

Therefore, in view of Niikawa ‘618, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of a controller for generating a plurality of interruption events including a print setting information interruption event for causing said information processing apparatus to set therein the print settings of the image data transmitted by said transmission means, the print setting information interruption event being generated in accordance with said operation panel setting the print settings after the image data read out by said reading means is transmitted to said information processing apparatus by said transmission means so that the generated print setting information interruption event is transmitted to said information processing apparatus, incorporated in the device of Ohtsuka ‘526, as modified by the features of Niikawa ‘500, in order to have the live-view image being taken by the camera to be displayed on the monitor of the personal computer (as stated in Niikawa ‘618 col. 1, ll. 19-32).

However, the combination of Ohtsuka '526 in view of Niikawa '500 and Niikawa '618 fails to specifically teach the generated print setting information interruption event includes the print settings set by said operation panel, detecting whether the interruption event received in said receiving step is the print setting information interruption event and controls the preview display such that the print settings included in the received print setting information interruption event are reflected in the image data received in said image data receiving step, every time the print setting information interruption event is detected, and the print settings included in the received print setting information interruption event, wherein the print settings reflected in the print preview display are the same print settings used to generate print data.

However, this is well known in the art as evidenced by Nakajima '687. Nakajima '687 discloses the generated print setting information interruption event includes the print settings set by said operation panel (i.e. the system of Nakajima '687, like Niikawa '500 and '618, contains a camera to send instructions and events to a computer and the computer is connected to a printer for printing (same field of endeavor). However, in Nakajima, the reference discloses a user setting different graphic processing control information for graphics data that is comprised of photo data taken. Once the user sets this information, the user is able to send the whole graphics file (GF) to an output device, such as a computer, that is able to perform the graphics processing similar to the printing device mentioned in the Nakajima reference; see ¶ [0056]-[0062] and [0107]-[0111]),

detecting whether the interruption event received in said receiving step is the print setting information interruption event and controlling the print preview display such that the print settings included in the received print setting information interruption event are reflected in the image data received in said image data receiving step, every time the print setting information interruption event is detected (i.e. in Nakajima, a computer is able to receive an event from the user interface of the digital camera and this transmission includes the settings that will be used to output the image data on the computer, which can then be forwarded to a printing device. The image data is read by the processing device within the computer and the different image settings can be automatically applied to the image data. Once these settings are applied to the image data, the processed image data can be reflected in the display of the computer. Every time the user sends image data over to the computer device, the application software used to perform the graphics processing checks to see if graphics processing control information is included in the image data sent to the computer; see ¶ [0056]-[0062], [0088]-[0091] and [0107]-[0111]),

the print settings included in the received print setting information interruption event, wherein the print settings reflected in the print preview display are the same print settings used to generate print data (i.e. in the system, the graphics processing settings that are reflected in the graphics processing control information are the same settings that are reflected in the computer display. Moreover, these same settings are going to be used in printing the image in order for the image to reflect the exact settings input by the user; ¶ [0006]-[0011]).

Therefore, in view of Nakajima ‘687, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of the generated print setting information interruption event includes the print settings set by said operation panel, detecting whether the interruption event received in said receiving step is the print setting information interruption event and controls the preview display such that the print settings included in the received print setting information interruption event are reflected in the image data received in said image data receiving step, every time the print setting information interruption event is detected, and the print settings included in the received print setting information interruption event, wherein the print settings reflected in the print preview display are the same print settings used to generate print data, incorporated in the device of Ohtsuka '526, as modified by the references of Niikawa ‘500 and Niikawa ‘618 in order to enable graphics processing to be performed to graphics data that accounts for the generation condition(s) (as stated in Nakajima ‘687 ¶ [0008]).

7. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohtsuka '526, as modified by the references of Niikawa ‘500, Niikawa ‘618 and Nakajima ‘687, and further in view of Narusawa ‘792 (USP 6948792).

Re Claim 19: Ohtsuka ‘526 discloses a print system comprising an external operating apparatus, a host computer which communicates with said external operating

apparatus, and a printer which communicates with said host computer, wherein said external operating apparatus comprises:

a display unit which displays a print setting screen (i.e. the digital camera used contains a monitor on the camera that displays setting value choices regarding print settings; see col. 6, ll. 1-56);

an operation panel which is operative to set print settings in accordance with a print setting instruction provided by a user based on the print setting screen displayed on said display unit (i.e. in the system, the digital camera has an operational panel, which allows the user to see the picture that has been photographed and also allows the user to set order information in regards to the necessity of printing and the quantity of prints desired by the user. The quantity of prints can be considered as the print setting instruction. With the function of setting the above parameters on the digital camera, it is clear that an input is received on the operational panel on the camera to signal a necessity of printing or quantity of printing to the digital camera. The digital camera is considered as an external operating apparatus; see fig. 1; col. 1, ll. 18-26 and col. 6, ll. 1-56),

a controller which generates a plurality of interruption events including a print setting information interruption event for causing said host computer to set therein the print settings of the image data, the print setting information interruption event being generated in accordance with the print setting instructions being provided to said operation panel (i.e. the digital camera is used to receive a printer instruction on the operation panel and this interruption event causes flags set for print settings and print

necessity to be set. The flags are then read by the host computer in order to set the print settings and other image data together in an order file before being transmitted to another device on a network; see col. 6, ll. 3-64), and a printer, said apparatus comprising:

a receiving unit which receives the image data read out by said reading means (i.e. in the system both the personal computer (4) and the order receiving apparatus (1) can be considered as a host computer. The personal computer (4) is able to receive image data from the digital camera. The input from the digital camera relates to information that was stored as a predetermined value before the information was input into the personal computer (4); see fig. 1; col. 7, ll. 1-66), and

a print control unit which generates print data corresponding to the print settings included in the received print setting interruption event (i.e. the order information instructs the printer to generate print data corresponding to the order information (12) specified in the order file (10). Although a print control unit is not specified, the order receiving apparatus (1) is clearly the printer control unit since the instructions for the printer has to be recognized and processed by the order receiving apparatus (1) and the printer is controlled by the apparatus (1) in order to output the desired document of the user; see fig. 1; col. 7, ll. 1-66, col. 8, ll. 35- 66, col. 9, ll. 1, 2 and col. 10, ll. 17-33),

wherein said printer prints the print data output from said host computer (i.e. the image and order files (9 and 10) are both used to reflect what the user desires to have printed by the printer (2) and this information has been outputted by the order receiving apparatus (1). Since the personal computer (4) sends information to the order receiving

apparatus to be printed, this is considered as the host computer that outputted print data to the printer (2); see fig. 1; col. 7, ll. 1-66, col. 8, ll. 35- 66, col. 9, ll. 1, 2 and col. 10, ll. 17-33).

However, Ohtsuka '526 fails to teach wherein said external operating apparatus comprises: reading means for reading out image data from a detachable storage medium; a button operative to instruct said host computer to preview the image data read out by said reading means; transmission means for transmitting the image data read out by said reading means, to said host computer in response to said button being operated; wherein said host computer comprises: a receiving unit which receives the image data read out by said reading means and then transmitted by said transmission means from said storage medium, and receives the plurality of interruption events generated by the controller from said external operating apparatus; a control unit that detects whether the interruption event received by said receiving unit is the setting information interruption event and controls print preview display such that the settings included in the received setting information interruption event are reflected in the image data received by said receiving unit, every time the setting information interruption event is detected.

However, this is well known in the art as evidenced by Niikawa ‘500. Niikawa ‘500 discloses wherein said external operating apparatus comprises:

reading means for reading out image data from a detachable storage medium (i.e. like the system of Ohtsuka, the reference of Niikawa comprises a camera communicating with a computer and the computer is connected to a printing device for

printing (same field of endeavor). However, the card I/F (212) is used to read image data from the memory card (8), which is considered as a detachable storage medium; see col. 6, ll. 9-13);

a button operative to instruct said host computer to preview the image data read out by said reading means (i.e. when the user presses the shutter button (9), this action creates a preview of the image on the computer screen of the Pc (1000). Since the shutter button operates in a manner analogous to the preview button, the above claim feature is performed; see col. 6, ll. 46 – col. 8, ll. 8 and col. 10, ll. 1-11);

transmission means for transmitting the image data read out by said reading means, to said host computer in response to said button being operated (i.e. in the system, the digital camera (1) can connected to the PC (1000) and it is able to transmit image data read out from its memory and an interruption event notifying the PC (1000) of the connection to the PC to the digital camera. The communication I/F (213) is used to transmit image data read out to the computer connected to the camera. When the user presses the shutter button (9), this action creates a preview of the image on the computer screen of the Pc (1000). Since the shutter button operates in a manner analogous to the preview button, the above claim feature is performed; see col. 6, ll. 46 – col. 8, ll. 8 and col. 10, ll. 1-11);

wherein said host computer comprises:

a receiving unit which receives the image data read out by said reading means and then transmitted by said transmission means from said storage medium, and receives the plurality of interruption events generated by the controller from said

external operating apparatus (i.e. in the system, the host computer is able to receive image data from the digital camera once the camera reads image data from the memory card (8) and transmits this information to the computer through the communication I/F (213). The host computer is also able to receive multiple inputs from the connected camera device; see col. 6, ll. 9-13);

a control unit that detects whether the interruption event received by said receiving unit is the setting information interruption event (i.e. in the system, the camera can send an interruption event regarding the updating of the image in the camera. If the image in the camera is changed, this is reflected in the PC's monitor. Also, the computer can receive information regarding the setting changes of the image data from the computer input devices; see col. 7, ll. 60-col. 8, ll. 20) and controls print preview display such that the settings included in the received setting information interruption event are reflected in the image data received by said receiving unit, every time the setting information interruption event is detected (i.e. in the PC, the monitor is updated in the change of the display when the color balance is adjusted in the system. The monitor of the PC being updated occurs in order to confirm the setting changes on the images. Also, the system is able to reflect the update of the image that may have changed due to movement of the camera or a different image being taken with different scene information. This is shown in the camera and the updated screen in the computer; see fig. 12; col. 7, ll. 42 - col. 9, ll. 41).

Therefore, in view of Niikawa '500, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of wherein said external

operating apparatus comprises: reading means for reading out image data from a detachable storage medium; a button operative to instruct said host computer to preview the image data read out by said reading means; transmission means for transmitting the image data read out by said reading means, to said host computer in response to said button being operated; wherein said host computer comprises: a receiving unit which receives the image data read out by said reading means and then transmitted by said transmission means from said storage medium, and receives the plurality of interruption events generated by the controller from said external operating apparatus; a control unit that detects whether the interruption event received by said receiving unit is the setting information interruption event and controls print preview display such that the settings included in the received setting information interruption event are reflected in the image data received by said receiving unit, every time the setting information interruption event is detected, incorporated in the device of Ohtsuka '526, in order to have a digital camera contain a communication interface to communicate with a PC (as stated in Niikawa '500 col. 6, ll. 9-13).

However, the references of Ohtsuka '526 and Niikawa '500 fail to specifically teach a controller which generates a plurality of interruption events including a print setting information interruption event for causing said information processing apparatus to set therein the print settings of the image data transmitted by said transmission means, the print setting information interruption event being generated in accordance with the print setting instruction being provided to said operation panel after the image data read out by said reading means is transmitted to said host computer by said

transmission means so that the generated print setting information interruption event is transmitted to said host computer.

However, this is well known in the art as evidenced by Niikawa '618. Niikawa '618 discloses a controller which generates a plurality of interruption events including a print setting information interruption event for causing said information processing apparatus to set therein the print settings of the image data transmitted by said transmission means, the print setting information interruption event being generated in accordance with the print setting instruction being provided to said operation panel after the image data read out by said reading means is transmitted to said host computer by said transmission means so that the generated print setting information interruption event is transmitted to said host computer (i.e. like the above applied references, the Niikawa '618 reference comprises a camera to send instructions and events to a computer and the computer is connected to a printer for printing (same field of endeavor). However, unlike Niikawa '500, Niikawa '618 discloses specifically sending an instruction from the camera operation panel to the computer after image data has been sent to the computer. As shown in figure 15, function keys can be registered to perform the features of displaying image data in a PC or execute an application in the personal computer. The user of the camera can set a function key to transmit image data to a PC and once the button is pressed, the key is able to perform this feature. Then the user can set another function key to perform a feature of displaying this data on the PC monitor. The system can also assign a function key for executing an application on the PC and the application on the PC can be similar to the color adjusting

program performed in the Niikawa '500 reference. The above is an example of sending an instruction to the PC after the image data is sent to a computer. It is also understood that the controller of the camera is used to generate the interruption event associated with the function keys. With the Ohtsuka reference modified by the references of Niikawa ‘500 and ‘618, the above claim limitation is performed; see fig. 15; col. 2-67).

Therefore, in view of Niikawa ‘618, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of a controller which generates a plurality of interruption events including a print setting information interruption event for causing said information processing apparatus to set therein the print settings of the image data transmitted by said transmission means, the print setting information interruption event being generated in accordance with the print setting instruction being provided to said operation panel after the image data read out by said reading means is transmitted to said host computer by said transmission means so that the generated print setting information interruption event is transmitted to said host computer, incorporated in the device of Ohtsuka ‘526, as modified by the features of Niikawa ‘500, in order to have the live-view image being taken by the camera to be displayed on the monitor of the personal computer (as stated in Niikawa ‘618 col. 1, ll. 19-32).

However, the combination of Ohtsuka '526 in view of Niikawa ‘500 and Niikawa ‘618 fails to specifically teach the generated print setting information interruption event includes the print settings provided to said operation panel, a control unit detects whether the interruption event received in said receiving step is the print setting

information interruption event, and controls print preview display such that the print settings included in the received print setting information interruption event are reflected in the image data received by said receiving unit, every time the print setting information interruption event is detected, and the print settings included in the received print setting information interruption event, wherein the print settings reflected in the print preview display are the same print settings used to generate print data.

However, this is well known in the art as evidenced by Nakajima '687. Nakajima '687 discloses the generated print setting information interruption event includes the print settings provided to said operation panel (i.e. the system of Nakajima '687, like Niikawa '500 and '618, contains a camera to send instructions and events to a computer and the computer is connected to a printer for printing (same field of endeavor). However, in Nakajima, the reference discloses a user setting different graphic processing control information for graphics data that is comprised of photo data taken. Once the user sets this information, the user is able to send the whole graphics file (GF) to an output device, such as a computer, that is able to perform the graphics processing similar to the printing device mentioned in the Nakajima reference; see ¶ [0056]-[0062] and [0107]-[0111]),

a control unit detects whether the interruption event received in said receiving step is the print setting information interruption event, and controls print preview display such that the print settings included in the received print setting information interruption event are reflected in the image data received by said receiving unit, every time the print setting information interruption event is detected (i.e. in Nakajima, a computer is able to

receive an event from the user interface of the digital camera and this transmission includes the settings that will be used to output the image data on the computer, which can then be forwarded to a printing device. The image data is read by the processing device within the computer and the different image settings can be automatically applied to the image data. Once these settings are applied to the image data, the processed image data can be reflected in the display of the computer. Every time the user sends image data over to the computer device, the application software used to perform the graphics processing checks to see if graphics processing control information is included in the image data sent to the computer; see ¶ [0056]-[0062], [0088]-[0091] and [0107]-[0111]),

the print settings included in the received print setting information interruption event, wherein the print settings reflected in the print preview display are the same print settings used to generate print data (i.e. in the system, the graphics processing settings that are reflected in the graphics processing control information are the same settings that are reflected in the computer display. Moreover, these same settings are going to be used in printing the image in order for the image to reflect the exact settings input by the user; ¶ [0006]-[0011]),

wherein said printer includes print setting means therein (i.e. figure 14 is an example of the table inside of the printing device that is used as a print setting means in order to correlate this information with the graphics processing control information; see ¶ [0097]-[0105]), and

wherein the print settings set by said print setting means included in said printer are reflected in a display by said display unit of said external operating apparatus (i.e. in the system, information that will be set by a printing device for an output can also be reflected in a display of the digital camera that sets these print settings for output; see figs. 9-11, ¶ [0081]-[0086]).

Therefore, in view of Nakajima ‘687, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of the generated print setting information interruption event includes the print settings provided to said operation panel, a control unit detects whether the interruption event received in said receiving step is the print setting information interruption event, and controls print preview display such that the print settings included in the received print setting information interruption event are reflected in the image data received by said receiving unit, every time the print setting information interruption event is detected, and the print settings included in the received print setting information interruption event, wherein the print settings reflected in the print preview display are the same print settings used to generate print data, wherein said printer includes print setting means therein, wherein the print settings set by said print setting means included in said printer are reflected in a display by said display unit of said external operating apparatus, incorporated in the device of Ohtsuka '526, as modified by the references of Niikawa ‘500 and Niikawa ‘618 in order to enable graphics processing to be performed to graphics data that accounts for the generation condition(s) (as stated in Nakajima ‘687 ¶ [0008]),

However, the combination of the references of Ohtsuka ‘526, Niikawa ‘500, ‘618 and Nakajima ‘687 fails to specifically teach the features of wherein said printer includes print setting means therein and transmits print settings set by said print setting means to said external operating apparatus, and wherein the print settings set by said print setting means included in said printer are reflected in a display by said display unit of said external operating apparatus.

However, this is well known in the art as evidenced by Narusawa ‘792. The Narusawa ‘792 discloses transmits print settings set by said print setting means to said external operating apparatus (i.e. like the previously applied references, the Narusawa reference is used to have a printing device communicate information to and print information from a digital camera (same field of endeavor). However, the system discloses a printer being able to send the print settings set in the printing device to the external operating apparatus, which is considered as the camera; see col. 10, ll. 55-col. 11, ll. 52).

Therefore, in view of Narusawa ‘792, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of a printer device that transmits print settings set by said print setting means to said external operating apparatus, incorporated in the device of Ohtsuka '526, as modified by the references of Niikawa ‘500, Niikawa ‘618 and Nakajima ‘687, in order to read and interpret the print-condition setting files stored in storage medium within the printing device (as stated in Narusawa ‘792 at col. 10, ll. 63-67 and col. 11, ll. 1-8).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Okisu '827 (US Pub No 2002/0140827) discloses a system with a camera connected to a computer and printer for printing. The camera is used perform adjustments to images and the computer can be used to show the images on the screen.

10. Niikawa '075 (USP 6947075) discloses a system similar to Niikawa '500 and '618 in which the camera's display can be seen real-time on the computer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAD DICKERSON whose telephone number is (571)270-1351. The examiner can normally be reached on 9:30-6:00pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Haskins can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/C. D./
/Chad Dickerson/
Examiner, Art Unit 2625

/Twyler L. Haskins/
Supervisory Patent Examiner, Art Unit 2625